

**Draft Summary of the Engineering and Operations Work Group Meeting
Oroville Facilities Relicensing (FERC Project No. 2100)
December 5, 2001**

The Department of Water Resources (DWR) hosted the Engineering and Operations Work Group meeting on December 5, 2001 in Oroville.

A summary of the discussion, decisions made, and action items is provided below. This summary is not intended to be a transcript, analysis of the meeting or to indicate agreement or disagreement with any of the items summarized, except where expressly stated. The intent is to present a summary of the discussion for information purposes to interested parties who could not attend the meeting. The following are attachments to this summary:

Attachment 1: Meeting agenda
Attachment 2: Meeting attendees
Attachment 3: White Papers Update
Attachment 4: Study Plan E4 Revision Presentation

Introduction

Attendees were welcomed to the Engineering and Operations Work Group meeting and objectives were discussed. The meeting was described as a combination Work Group and Task Force meeting to facilitate the approval of Engineering and Operations draft Study Plans, which will be presented to the Plenary Group at the December 11, 2001 meeting. The meeting agenda and list of meeting attendees with their affiliations are appended to this summary as Attachments 1 and 2, respectively.

Action Items

A summary of the November 16, 2001 Engineering and Operations Work Group is posted on the relicensing web site. The Facilitator reviewed the status of action items from the November 16, 2001 Engineering and Operations Work Group meeting as follows:

- Action Item #EO26:** Hold a flood management workshop that would include representatives from the Comprehensive Study, Yuba County, etc.
Status: Rashid Ahmad with DWR contacted the agencies and has invited the Corps of Engineers (COE). Four different groups will be making presentations. Invitations will be sent soon for the Flood Management Workshop on Dec 17. This meeting will be held at the Eagles Hall in Oroville.
- Action Item #EO27:** Prepare a description of the issue transfer process, identify point people within other work groups, and outline the proposed approach to evaluating power economics, including the relationship to socioeconomic studies.
Status: Wayne Dyok of the consulting team was not here so this description was not available. Lori Brown of DWR announced that Howard Lee would assist the department with the economics portion of the relicensing process.
- Action Item #EO28:** Coordinate with Cultural Work Group on potential to expand APE to capture potential downstream erosion.
Status: Ralph Torres with DWR stated that this is an on-going effort. As other Study Plans develop they will coordinate to see how best to work together. Ken Kules of Metropolitan Water District clarified that the Cultural Resources Work Group is looking at potential effects caused by erosion on cultural resources downstream of the Project.
- Action Item #EO29:** Get results from the 2030 simulation model from DWR when available.
Status: Bill Smith of the consulting team reported that hydrology should be done in April 2002. Simulation will be completed shortly thereafter and distributed as soon as possible.
- Action Item #EO30:** Check on the availability of the MS Projects Critical Path file.
Status: Ralph Torres with DWR reported that the consulting team is working on a critical path document for the entire set of Study Plans from all work groups. They have been asked to pull out Engineering and Operations and show it separately. The Study Plan package to be distributed to the Plenary Group will identify the critical path Study Plans so the Plenary Group can focus on those first.
- Action Item #EO31:** Check with Steve Reynolds about ground water seepage issue.

Status: Ralph Torres reported that well studies were done in the 1980's, and he participated in that effort. The documents are currently unavailable due to an office move, but will be obtained as soon as possible.

Action Item #EO32: Review SWC comments on Study Plan 4. Complete revisions and redistribute to the Work Group.

Status: Study Plan 4 with revisions will be discussed today.

Action Item #EO33: Contact Comprehensive Study representatives from Stewart Edell's contact information and invite appropriate people to the December 5, 2001 Work Group meeting.

Status: These representatives will be invited to participate in the Flood Management Workshop scheduled for December 17 in Oroville.

Action Item #EO34: Include section on Study Plan status in Study Plan summaries.

Status: The Facilitator reported that each Study Plan abstract would include a Status section to identify activity to be completed for that particular Study Plan.

Ralph Torres told the participants that this is his last meeting as Resource Area Manager for the Engineering and Operations Work Group but he would still be involved in the Oroville Relicensing as a member of the Steering Committee. The Engineering and Operations Work Group will now be co-managed by Curtis Creel and Rashid Ahmad; Curtis will be responsible for operations and Rashid will oversee engineering. As a team Curtis and Rashid will address additional hydro relicensing issues at Oroville. Ralph thanked everyone for his or her efforts, congratulated them on progress to date and encouraged everyone to remain committed to the collaborative process.

Task Force Update

The Engineering and Operations Study Plan Development Task Force continued to accept comments and make minor revisions to the preliminary draft Study Plans, following the Work Group direction to make revisions as long as they do not change the main objectives and concepts described in the November 16th Work Group meeting presentations. This meeting is a combination Task Force/Work Group meeting to facilitate the Study Plan approval process prior to the December 11th Plenary Group meeting.

White Papers

Lori Brown gave a slide presentation on the progress and content of the white papers (Attachment 3). The white papers will be completed in conjunction with the Study Plans. Background information will be gathered at the beginning of the year.

Study Plan Review

The Engineering and Operations Work Group discussed all Engineering and Operations draft Study Plans except Study Plan E4 at their November 16, 2001 meeting. Participants agreed to revisit SP-E4, Measures to Improve Flood Protection Provided by Oroville Facilities, after the multi-agency Flood Management Workshop planned for December 17, 2001 in Oroville. Additionally, the State Water Contractors submitted numerous suggested revisions to SP-E4. Work Group participants agreed to discuss the plan, and the SWC's suggested additional revisions during this meeting.

Study Plan E4

Rashid Ahmad with DWR, presented edits to SP-E4 in a slide presentation. The presentation is provided as Attachment 4 to this summary. Rashid indicated where the Study Plan had been modified according to comments received, including a title change to "Flood Management Study". He explained that additional information was added to the background information and Probable Maximum Flood (PMF), flood control space, and release requirements were included. The study goals and objectives contained more detail and emphasis had been put on documentation of current information. Also added were additional potential approaches for flood management, including modification of operation rules and storage amounts, and in the use of forecast-based operation basin inflow and weather conditions, land use zoning changes, and potential improvement of the current notification procedure and warning systems. Task 3 was modified to delete the evaluation of changes in channel geometry on flow capacity downstream of Oroville Dam. Since the channel now has sufficient capacity, there is no need for this evaluation.

Stuart Edell with Butte County pointed out that this study seems to be focused on maximizing flood control and does not seem to consider the impacts maximum flood control (empty lake) would have on other resources such as reservoir-based recreation. He suggested this study consider a balance between recreational needs (full lake) and flood control needs (less than full lake). Rashid Ahmad agreed that this was a good comment and will be included in the Study Plan.

Mary Keller of Sutter County asked how DWR would insure the U.S. Army Corps of Engineers' (COE) flood operations manual is updated to reflect current water flows. Curtis Creel stated that decisions regarding flows and releases are made in concert with the COE. When changes are made they are done with the COE and all other parties involved so that downstream effects are considered.

One participant requested the US Geological Survey (USGS) and the U.S. Fish and Wildlife Service (USFWS) be added to the coordination groups identified.

Bill Lewis of Yuba City asked that the terms "flood control" and "flood management" be better defined in the document. All participants agreed that definitions would be appropriate to add.

Craig Jones of State Water Contractors (SWC) stated that the revisions as described appear to incorporate all of their substantive comments, and they are comfortable with the current draft with the revisions included in the Draft Study Plan Package to be presented at the December 11th Plenary Group meeting. Ralph Torres reminded the group that while the Plenary Group is reviewing the draft Study Plans, the Work Groups will continue to refine and add detail to the Study Plans as needed. The Plenary Group will provide comments back to the Work Groups after their January meeting and will also provide the Work Groups with any relevant comments on Scoping Document 1 received as part of the public scoping process. The goal is to approve Study Plans in March 2002, particularly for the identified Critical Path studies.

Ken Kules with Metropolitan Water District asked about return flow from farms to the Feather River. For example, do we know what the temperature is as it returns to the river and is that important to understanding temperatures downstream? He mentioned that SWRCB is interested in identifying appropriate places for the temperature modeling devices to ensure they pick up flow temperatures entering the Feather River, such as the outfall from the City's wastewater treatment plant. Curtis Creel suggested that DWR's Northern District might be able to put something together on irrigation return flows from a hydrologic balance perspective. It was agreed that this information would be helpful and DWR agreed to ask Northern District to provide any information they have on that to the Work Group. Ken asked when they might know how far down the Feather River Oroville operations affect temperature? Curtis thought they would have some modeling results by summer 2002.

The Engineering and Operations Work Group agreed by consensus to forward all Engineering and Operations draft Study Plans on to the Plenary Group for review. The participants also agreed to send SP-E4 to the Plenary Group with a note indicating that the Work Group might substantially modify the Study Plan after the Flood Management Workshop is held.

Next Meeting

Lori Brown distributed a draft schedule for 2002 Work Group and Plenary Group meetings and asked for the participants to review and approve the dates indicated for Engineering and Operations Work Group meetings. The Work Group agreed to meet on February 1, 2002 at the Oroville Field Division but withheld approval of the other dates, pending corrections to the draft schedule. Lori agreed to re-distribute a corrected schedule for 2002 and the participants agreed to discuss the dates at the next Engineering and Operations Work Group meeting.

NOTE: The meeting date was subsequently changed to Friday, January 25, 2002.

The Engineering and Operations Work Group agreed to meet on:

Date: January 25, 2002
Time: 10:00 a.m. – 3:00 p.m.
Location: Oroville Field Division

Agreements Made

The Engineering and Operations Work Group agreed by consensus to forward all Engineering and Operations draft Study Plans on to the Plenary Group for review with status information included in the Study Plan abstracts.

Action Items

The following list of action items identified by the Engineering and Operations Work Group includes a description of the action, the participant responsible for the action and item status.

Action Item #EO35: Provide summary of information related to agricultural return flows to the Feather River

Responsible: DWR – Northern District

Due: January 25, 2002

Action Item #EO36: Distribute corrected meeting schedule for 2002

Responsible: DWR – Lori Brown

Due: January 25, 2002

Carryover Action Items:

Action Item #EO27 Prepare a description of the issue transfer process, identify point people within other work groups, and outline the proposed approach to evaluating power economics, including the relationship to socioeconomic studies.

Status: Wayne Dyok of the consulting team will provide description

Action Item #EO29 Get results from the 2030 simulation model from DWR when available.

Status: Results expected by May 2002.

Action Item #EO30 Check on the availability of the MS Projects Critical Path file.

Status: Under development by consulting team

Action Item #EO31 Check with Steve Reynolds about ground water seepage issue.

Status: Documents will be obtained when available after office move.